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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

Application Number: 09/838,652

Filing Date: April 19, 2001 Appellant(s): KYLE ET AL.

FEB 1 5 2007

Technology Center 2100

Advanced Micro Devices, Inc. For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 11/07/06 appealing from the Office action mailed 8/11/06.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

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(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,978,849	Khanna	11-1999
6,229,787	Byrne	5-2001

UK Patent Application: GB 233671 A; IBM; 07-1999

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 14, and 40 are rejected under 35 U.S.C. 102(b) as being taught by Raguseo (GB 2233671 A).

As to claim 1, Raguseo teaches a method for automatically restoring logon connectivity in a network system comprising the steps of

establishing a first connection between a client and an Internet gateway (there is a systems with means for establishing a communication between two nodes (one of which can be a LAN gateway server) using a first protocol, page 3, lines 30-40)

checking status of said first connection by issuing a first request to said

Internet gateway to access a web server utilizing a protocol blocked under a logged

off status (the status of the connection is checked by a plurality of methods including

polling at intervals and also when a client workstation issues an access request. The

protocol used is one used when "server crashes down" among other faults; page 3,

lines 30-40, page 5, lines 18-25, and page 6, lines 1-10);

determining whether said web server is accessed from said first request (page 3, lines 30-40 and page 6, lines 1-10); and

automatically attempting to establish a second connection to said Internet gateway if said web server was not accessed from said first request (a new connection is created if the first connection has failed; page 3, lines 30-40, page 5, lines 18-30, and page 6, lines 1-10).

Claims 14 and 40 recite similar limitations and are thus rejected under similar rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10, 14-23 and 40-49 are rejected under 35 U.S.C. 103(a) as being taught by Khanna (USPN: 5978849) further in view of Byrne (USPN: 6229787).

As to claim 1, Khanna teaches a method for automatically restoring logon connectivity in a network system comprising the steps of

establishing a first connection between a client and an Internet gateway (a server receives a clients request for a connection; col 7, lines 42-57)

determining whether said web server is accessed from said first request (col 7, lines 46-62); and

automatically attempting to establish a second connection to said Internet gateway if said web server was not accessed from said first request (a new connection is created if the first connection has failed; Fig 5; col 7, 46-57).

However, Khanna does not explicitly indicate checking status of said first connection by issuing a first request to said Internet gateway to access a web server utilizing a protocol blocked under a logged off status.

Byrne teaches a method in which the status of the connection is checked via an update request. (col 7, lines 20-32).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Byrne into those of Khanna to make the system more robust. By checking the status of the connection directly with end-point via a request, one can avoid erroneous or outdated information within the TW_TCB. Furthermore, the system would know the exact status of the current node and avoids storing costly status lists constantly.

As to claim 2, Khanna teaches the method as recited in claim 1, wherein if said web server was accessed from said first request then the method further comprises the steps of: waiting for a first period of time (col 6, lines 44-67);

and checking status of said first connection by issuing a second request to said Internet gateway to access said web server utilizing said protocol blocked under said logged off status (col 7, lines 10-17 and 46 to col 8, line 20).

As to claim 3, Khanna teaches the method as recited in claim 2, wherein upon said attempting to establish said second connection to said Internet gateway the method further comprises the step of: waiting for a second period of time, wherein said second period of time is less than said first period of time; and checking status of said attempted second connection by issuing a third request to said Internet gateway to access said web server utilizing said protocol blocked under said logged off status (col 1, line 65 to col 2, line 23; col 6, line 56 to col 7, line 30).

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As to claim 4, Khanna teaches the method as recited in claim I., wherein said first connection is established by a first logon procedure (col 7, line 42-46).

As to claim 5, Khanna teaches the method as recited in claim 4, wherein said step of attempting to establish said second connection comprises the steps of: terminating said first logon procedure; and executing a second logon procedure (col 7, lines 4-9 and col 7, lines 42-62).

As to claim 6, Khanna teaches the method as recited in claim 5 further comprising the step of waiting for a first period of time (abstract).

As to claim 7, Khanna teaches the method as recited in claim 6 further comprising the step of checking status of said attempted second connection by issuing a second request to said Internet gateway to access said web server utilizing said protocol blocked under said logged off status (col 7, lines 46 to col 8, line 20).

As to claim 8, Khanna teaches the method as recited in claim 7 further comprising the step of: determining whether said web server is accessed from said second request (col 7, line 55 to 62).

As to claim 9, Khanna teaches the method as recited in claim 8, wherein if said web server is accessed from said second request then the method further comprises

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the steps of waiting for a second period of time, wherein said first period of time is less than said second period of time; and checking status of said attempted second connection by issuing a third request to said Internet gateway to access said web server utilizing said protocol blocked under said logged off status (col 7, lines 46 to col 8, line 20).

As to claim 10, Khanna teaches the method as recited in claim 8, wherein if said web server was not accessed from said second request then the method further comprises the step of: automatically attempting to establish a third connection to said Internet gateway (col 7, lines 46 to col 8, line 20).

Claims 14-26 and 40-52 are essentially the system and the computer program product for the above-mentioned method claims and are thus rejected under similar rationale.

Claims 11-13, 24-26, and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khanna and Byrne in view of Official notice.

As to claims 11, 24, and 50, Khanna teaches the method as recited in claim 1, however does not teach wherein said protocol is a HyperText Transport Protocol.

Official notice is taken that It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate HTTP into Khanna because Khanna

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essentially teaches content sharing/transmission via online communications protocols like TCP to accomplish a similar task.

As to claim 12, 25, and 51, Khanna teaches the method as recited in claim 1, however does not teach wherein said protocol is a file transfer protocol.

Official notice is taken that It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate FTP into Khanna because Khanna essentially teaches content sharing/transmission via online communications protocols like TCP to accomplish a similar task.

As to claim 13, 26, and 52, Khanna teaches the method as recited in claim 1, however does not teach wherein said protocol is a telnet protocol.

Official notice is taken that It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate telnet into Khanna because Khanna essentially teaches content sharing/transmission via online communications protocols like TCP to accomplish a similar task.

(10) Response to Argument

The examiner summarizes the various points raised by the appellant and addresses them individually.

The examiner has given the appellants numerous rejections, in an effort to vividly portray the examiner's position. In the past, the appellant has been granted numerous opportunities to amend their claims to overcome the examiner's rejections but to no

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avail. The examiner maintains that the appellant's claims are broad and thus interpreted as such.

A person with ordinary skill in the art at the time of the invention would certainly be accustomed to the system disclosed by the appellant. Such a system has been used in many embodiments prior to the appellant's effective filing date. For example, one would appreciate a system for checking one's email via a thin client (i.e. Hotmail, Yahoo mail, or G-mail). A user of such a system opens a new mail message and begins to write. The email is a lengthy email and takes the user some time to write. The user sends the email but because the user had no "active" interaction with the email system, the session has been disconnected without notification to the user (i.e. timed-out). The user's subsequent sending of the email would not be possible if one was logged off (this simple action by the user entails a great deal of activity by the emailing system in which numerous protocols are used, such as SMTP, POP, HTTP, TCP/IP, etc.). The user is automatically redirected to a logon page to re-authenticate themselves. If the user possesses any one of e-wallet, cookies, passport (such as MSN's), the password and username would automatically be entered and submitted. Thus the connection would be re-established. This would also hold true for other websites requiring a session such as E-bay, banking websites, ticketmaster, etc. It is also noteworthy to realize the scope of the appellant's claim in that their claims do not +require a re-establishing of the connection, rather simply an attempt.

In yet another example, a user of modems would appreciate a similar system in which they connect through an ISP. The ISP, after proper authentication of the user,

forwards the user to the desired content on the Internet. If, however, the user is inactive for a given time interval, the ISP would disconnect from the Internet but not close the user's browser. A subsequent interaction by the user with the browser would trigger similar events as explained above. Disconnection would be detected via an action utilizing a protocol blocked under a logged off status and the ISP would attempt to reconnect with the information previously provided by the user. So, therefore, the examiner maintains that the appellant's claims as currently written were common knowledge and widely used at the time of the "invention". Nevertheless, the examiner has still provided multiple disclosures to help illustrate the point.

As per appellant's arguments filed 11/7/06, the appellant argues:

Raguseo does not disclose establishing a first connection between a client and Internet Gateway because there is no Internet Gateway disclosed by Raguseo (see Brief, page 5—Argument A)

In response, although Raguseo does not explicitly state an "Internet gateway", he does teach the logical equivalent of the appellant's Internet gateway as described in the applicant's specification, namely a redirector. Appellant's specification teaches on page 1 that an Internet gateway is an intermediary that facilitates the connection between a given subscriber and a remote resource (i.e. the Internet). Raguseo's redirector facilitates a workstation/computer to access a file via a communications network on a remote server. With the assistance of the redirector, the user can access the remote resource without worrying about the physical location of the resource (page 2, line 14-20). Furthermore, a redirector such as the one taught by Ragueso is quite common in

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the art and commercially available. LAN Servers and NFS of IBM specifically use TCP/IP, the underlying protocol of the Internet (page 2, lines 21-32). Therefore, Raguseo teaches the Internet gateway as disclosed by the appellant.

Raguseo does not disclose checking the status of said first connection by issuing a first request to said Internet Gateway to access a web server utilizing a protocol blocked under a logged off status (see Brief, page 5—Argument B)

In response, Raguseo teaches detecting a fault in the communication between two nodes by monitoring in accordance with different situations and requirements. For example, one solution "is a process which always stays active and performs check of the connection at fixed time intervals". Another solution is by performing a check only when an access to a remote resource is requested by a workstation (pages 5, lines 18-25 and page 6, lines 1-10). Thus the request would be one utilizing a protocol that would be unblocked in a logged on status and blocked under a logged off status. The disconnection operation is dependent upon the redirector and the protocol used. Therefore, Raguseo does teach checking the status of said first connection by issuing a first request to said Internet gateway to access a web server utilizing a protocol blocked under a logged off status.

Raguseo does not disclose determining whether said web server is accessed from said first request (see Brief, page 6—Argument C)

In response, Raguseo is generally directed towards accessing a server. If a disconnection is detected, it would prelude to the fact that the connection with the server was not successful. Moreover, there could be different reasons for the disconnection

and subsequently the failure to access the server such as there is a hardware problem, communication is no longer possible, the server has crashed, the node is physically disconnected, etc. (page 5, lines 18-25)

Raguseo does not disclose automatically attempting to establish a second connection to said Internet gateway if said web server was not accessed from said first request (see Brief, page 7—Argument D)

In response, Raguseo teaches "automatically re-establishing the communication between said two nodes using a second of said plurality of available communication protocols" (page 3, lines 38-40). The appellant's do not claim actually establishing, rather simply attempting to do so. This could be by issuing a second request (via the periodic polling of Raguseo). Nevertheless, Raguseo teaches the automatic reestablishment using another redirector, protocol, or different route. Therefore, Raguseo goes above and beyond the limitations of the appellant.

Khanna and Byrne do not teach an Internet gateway (see Brief, page 8—Argument E)

In response, as was previously discussed, the Internet gateway of the appellant is logically equivalent to the server of Khanna. Appellant's specification teaches on page 1 that an Internet gateway (e.g. ISP) is an intermediary that facilitates the connection between a given subscriber and a remote resource (i.e. the Internet). As is clearly evident by Khanna's disclosure (i.e. see abstract), there is a control block which facilitates the establishment of a TCP connection between a client and a remote server. TCP/IP is the "building block" of the Internet and the underlying protocol suite.

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Furthermore, Khanna teaches the Internet connection maybe via an itermeidary part such as an ISP (col 4, lines 17-22). Therefore, Khanna's disclosure, which was relied upon by the examiner, sufficiently teaches this limitation.

Khanna and Byrne do not teach checking status of said first connection by issuing a first request to said Internet gateway to access a web server utilizing a protocol blocked under a logged off status (see Brief, page 9—Argument F)

In response, Khanna teaches upon a new TCP request, checking the connection for validity. If a disconnection is detected, creating a new connection using the information in the TCB block (fig 5, col 7, lines 42-62). Nevertheless, the examiner had explicitly indicated that Khanna did not disclose the above-argued limitation. Rather, the examiner relied upon Byrne to teach this limitation. Byrne teaches sending a PNNI update message. The update message would be blocked if the connection had failed and valid otherwise. In response to the update message, a determination is made whether the connection has failed (col 7, lines 20-26). Therefore, Khanna and Byrne still meet the scope of the limitations as currently claimed.

Khanna and Byrne do not teach determining whether said web server is accessed from said first request (see Brief, page 10—Argument G)

In response, Khanna teaches the utilization of TCP. TCP, transmission control protocol, uses a '3-way handshake' to establish a connection. This requires sending acknowledgement and synchronize messages. Furthermore, during the course of a session, if a request of any kind was made, the recipient would have to acknowledge the message via an acknowledgement (ACK) packet. If, however, after a

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predetermined interval, an ACK packet was not received, it is deduced there was an error in the transmission and the web server was not accessed (col 5, lines 44-66). Furthermore, Byrne, the secondary reference, teaches the recognition of the fact that an update message did not successfully reach the recipient. Thus a second connection must be utilized (col 7, lines 20-26). Therefore, Khanna and Byrne still meet the scope of the limitations as currently claimed.

Khanna and Byrne do not teach automatically attempting to establish a second connection to said Internet gateway (see Brief, page 10—Argument H)

In response, both Khanna and Byrne teach automatically attempting to establish a second connection to said Internet gateway. More specifically, Khanna teaches utilizing the TW_TCB information to reinitialize a connection without having to go thorugh the complete '3-way handshake' of TCP upon detection of a failed connection. The client would not be required to submit further information, thus automating the establishment of the new connection (Fig 5; col 7, 46-57). Furthermore, the appellant's claim language does not actually specify creating a new connection, rather just attempting to do so. Byrne also teaches using a dedicated second end-to-end connection upon failure of the first connection (col 7, lines 20-26). Therefore, Khanna and Byrne still meet the scope of the limitations as currently claimed.

Khanna and Byrne do not teach waiting for a first period of time if said web server was accessed from said first request (see Brief, page 12—Argument I)

In response, Khanna teaches the use of TIME-WAIT for closing active connections. The connection can only be active if the web server had been accessed

(col 7, lines 10-29). Furthermore, TCP utilizes a mechanism called slow-start. This mechanism, in and effort to avoid network congestion and robust server performance, allows for a window of packets. The more packets that are successfully sent, the larger the window is (i.e. more packets are allowed to be transmitted and subsequently each packet wait time becomes smaller incrementally) (col 2, lines 8-23). Therefore, Khanna still meets the scope of the limitations as currently claimed.

Khanna and Byrne do not teach wherein if said web server was accessed from said first request, then checking status of fist connection by issuing a second request (see Brief, page 12—Argument J)

In response, Khanna teaches the use of update messages to periodically update the status of the connection. Furthermore, Khanna discloses the use of active disconnection in which the connection can linger in TIME-WAIT state in which time a user can issue numerous SYN packets to re-open a connection. If however, there is no SYN packet or that the SYN packet is old, the connection will return to TIME-WAIT state (col 7, lines 10-18). Therefore, Khanna still meets the scope of the limitations as currently claimed.

Khanna and Byrne do not teach the second period of time being less than the first period of time (see Brief, page 13—Argument K)

In response, Khanna teaches mechanism called slow-start. This mechanism, in and effort to avoid network congestion and robust server performance, allows for a window of packets. The more packets that are successfully sent, the larger the window is (i.e. more packets are allowed to be transmitted and subsequently each packet wait

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time becomes smaller incrementally) (col 2, lines 8-23). Therefore, Khanna still meets the scope of the limitations as currently claimed.

Khanna and Byrne do not teach first connection is established by a first logon procedure (see Brief, page 15—Argument L)

In response, Khanna teaches establishing the first connection via a log-on process. Khanna 's procedure allows the user to log-on to the web server (col 7, lines 42-46). This interpretation of the claims is consistent with the claim language as in the independent claims. The independent claims state establishing a connection and then checking the status by using a protocol that is blocked under a logged-off status. Therefore, one must be logged on the system to utilize a protocol that would normally be blocked under a logged-off status. Therefore the reestablishment of the connection must at the very least utilize a similar log-on procedure as the original connection. Therefore, Khanna still meets the scope of the limitations as currently claimed.

Khanna and Byrne do not teach terminating said first logon procedure and executing a second logon procedure (see Brief, page 15—Argument M)

In response, Khanna teaches establishing the first connection via a log-on process. Khanna 's procedure allows the user to log-on to the web server (col 7, lines 42-46). Also, a the system can actively close the connection and then either establish a new connection or reinitialize the old one. Therefore the first connection has failed because, the request as in the independent claims, has indeed indicated the user is logged-off. This interpretation of the claims is consistent with the claim language as in the independent claims. The independent claims state establishing a connection and

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then checking the status by using a protocol that is blocked under a logged-off status. Therefore, one must be logged on the system to utilize a protocol that would normally be blocked under a logged-off status. Therefore the reestablishment of the connection must at the very least utilize a similar log-on procedure as the original connection. Therefore, Khanna still meets the scope of the limitations as currently claimed.

Khanna and Byrne do not teach checking status of said attempted second connection by issuing a second request to said Internet gateway, determining whether said web server is accessed from said second request, waiting for a second period of time wherein said first period of time is less (see Brief, page 17—Argument N)

In response, Khanna's method applies to all connections. Thus, a second connection is going to be treated the same as a new connection in terms of checking connectivity, etc (Fig 5; col 7, 46-57). Therefore, Khanna still meets the scope of the limitations as currently claimed.

The examiner has simply stated to make the system more robust as a motivation (see Brief, page 18—Argument O)

In response, the examiner traverses the appellant's assertion that "the Examiner simply states to make the system robust". This is simply incorrect and is a prime example of misconstruing the examiner's rejection for mere arguments. The appellants further argue that the motivation can only come from three possible sources: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. The examiner had explicitly stated in the office action, "It would have been obvious to one of ordinary skill in the art at the time of the invention to

incorporate the teachings of Byrne into those of Khanna to make the system more robust. By checking the status of the connection directly with end-point via a request, one can avoid erroneous or outdated information within the TW_TCB. Furthermore, the system would know the exact status of the current node and avoids storing costly status lists constantly." Therefore, not only had the examiner given a reasoning, the examiner had also pointed out that the source of motivation would be from a person of ordinary skill in the art at the time of the invention (examples of this are given in the Response to Arguments section above). Therefore, Khanna and Bryne still meet the scope of the limitations as currently claimed.

A skilled artisan would not find it obvious to incorporate HTTP in the systems of Khanna and Byrne (see Brief, page 25—Argument P)

In response, Khanna explicitly teaches the use of HTML data and web servers (col 2, lines 24-38). As would be appreciated by the most novice of users, the most common method of retrieving web documents in HTML is by the use of HTTP. In fact, the most novice of users would also appreciate the fact that most URLs begin with the prefix 'http://'. Therefore, it would be obvious to use HTTP in the systems of Khanna and Bryne.

Examiner has not provided a reference to teach HTTP (see Brief, page 26—Argument Q)

In response, the examiner's Non-final office action mailed 8/11/06 and from which the appellants appealed, was a new rejection on new basis with new art.

Therefore, the examiner did not have sufficient notice of providing a reference to teach

HTTP. It would, however, still be appreciated that it was very common at the time of the invention.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Asad M. Nawaz

Conferees:

SPE Saleh Najjar

SUPERVISORY PATENT EXAMINER

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